

**I CLAIM:**

1. A method of data backup of data stored in a first storage device coupled to a computer system, comprising steps of:
  - a) storing to a backup storage device coupled to the computer system at least one full backup, each full backup comprising a copy of said data selected from the first storage device in accordance with a first criteria and attribute data representative of attributes of the selected data;
  - b) storing to the backup storage device zero, one or more incremental backups, each incremental backup comprising a copy of said data selected from the first storage device in accordance with the first criteria and a second criteria and attribute data representative of attributes of the selected data, said second criteria determined in relation to a parent backup comprising one of a selected full backup and incremental backup previously stored to the backup storage device; and
  - c) storing parent data representative of the relationship of each incremental backup to its respective parent backup in a dependency data structure.
2. The method as claimed in claim 1 comprising: periodically performing steps b) and c) in accordance with two or more time intervals and respective second criteria to store different incremental backup types to provide different data granularity.

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3. The method as claimed in claim 1 wherein the storing of step c) comprises storing the data dependency structure to the backup storage device.
4. The method as claimed in claim 3 wherein the backup storage device is operable with a one or more storage media and wherein the method comprises the steps of:
  - d) providing at least two storage media; and
  - e) performing steps a), b) and c) using said at least two storage media in a rotational manner; andwherein, for each incremental backup to be stored to a one of the storage media, the second criteria is determined in relation to a parent backup stored to the one of the storage media.
5. The method as claimed in claim 1 wherein the dependency data structure is a tree-like data structure.
6. The method as claimed in claim 1 including the step of:

verifying the storing of the selected data stored to the backup storage device.
7. The method as claimed in claim 1 including the step of:

paring at least one of a full and incremental backup at the backup storage device automatically in accordance with a plan to manage the full and incremental backups.

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8. The method as claimed in claim 7 wherein the plan is configured to manage an amount of available storage space at the backup storage device.
9. The method as claimed in claim 2 including the step of:  
  
paring at least one of a full and incremental backup at the backup storage device automatically to manage the full and incremental backups in accordance with an amount of available storage space at the backup storage device.
10. The method as claimed in claim 1 including the steps of:  
  
identifying a backup stored to the backup storage device comprising data to be restored to a second storage device coupled to the computer system, said backup defining a current backup;  
  
copying the data to be restored to the second storage device from the data stored to the current backup; and  
  
repeating until all the data to be restored is copied to the second storage device:  
  
determining the portion of said data to be restored remaining to be copied;  
  
determining a parent backup to the current backup from the dependency data structure said parent backup redefining the current backup;  
and  
  
where the data stored to the current backup comprises any of the portion of said data to

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be restored remaining to be copied, copying the any of the portion of data to the second storage device from the current backup.

11. A computer system comprising

a processing means;

means for coupling the processing means to a first data storage device, the first storage device comprising data to be backed up, said data having a first characteristic;

means for coupling the processing means to a backup data storage device;

said processing means configured to:

storing to the backup storage device at least one full backup, each full backup comprising a copy of said data selected from the first storage device in accordance with a first criteria and attribute data representative of attributes of the selected data;

storing to the backup storage device zero, one or more incremental backups, each incremental backup comprising a copy of said data selected from the first storage device in accordance with the first criteria and a second criteria and attribute data representative of attributes of the selected data, said second criteria determined in relation to a parent backup comprising one of a selected full backup and incremental backup previously stored to the backup storage device; and

storing a parent data representative of the relationship of each incremental backup to its

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respective parent backup in a dependency data structure.

12. The system as claimed in claim 11 wherein the processing means is configured to:  
  
periodically perform steps b) and c) in accordance with two or more time intervals and respective second criteria to store different incremental backup types to provide different data granularity.
13. The system as claimed in claim 11 wherein the processing means is configured to storing the dependency data structure to the backup storage device.
14. The system as claimed in claim 13 wherein the backup storage device is operable with a one or more storage media and wherein the processing means is configured to:  
  
for each incremental backup to be stored to a one of the storage media, determine the second criteria in relation to a parent backup stored to the one of the storage media to permit the use of at least two storage media in a rotational manner.
15. The system as claimed in claim 11 wherein the dependency data structure is a tree-like data structure.
16. The system as claimed in claim 11 wherein the processing means is configured to:

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pare at least one of a full and incremental backup at the backup storage device automatically in accordance with a plan to manage the full and incremental backups.

17. The system as claimed in claim 16 wherein the plan is configured to manage an amount of available storage space at the backup storage device.

18. The system as claimed in claim 12 wherein the processing means is configured to:

pare at least one of a full and incremental backup at the backup storage device automatically to manage the full and incremental backups in accordance with an amount of available storage space at the backup storage device.

19. The system as claimed in claim 12 comprising means for coupling the computer system to a second storage device and wherein the processing means is configured to:

identify a backup stored to the backup storage device comprising data to be restored to the second storage device, said backup defining a current backup;

copy the data to be restored to the second storage device from the data stored to the current backup; and

repeat until all the data to be restored is copied to the second storage device:

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determining the portion of said data to be restored remaining to be copied;

determining a parent backup to the current backup from the dependency data structure, said parent backup redefining the current backup; and

where the data stored to the current backup comprises any of the portion of said data to be restored remaining to be copied, copying the any of the portion of data to the second storage device from the current backup.

20. A computer readable medium containing executable program instructions for backing up data from a first storage device to a backup storage device, said devices coupled to a computer system, the computer readable medium comprising program instructions for directing the computer system to implement the method of claim 1.